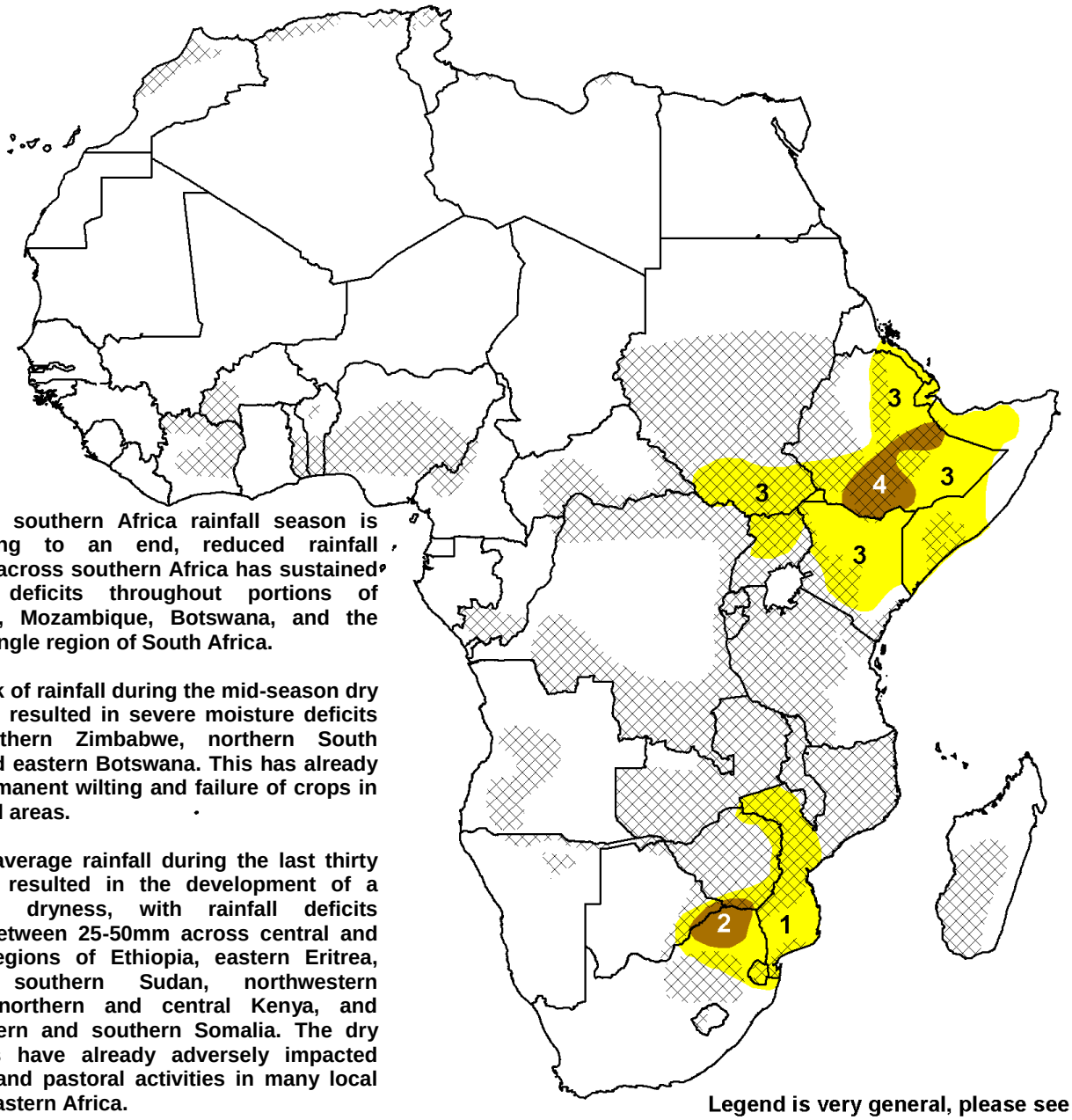
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
April 21 – April 27, 2011

- **The poor performance of the rainfall season has enhanced prolonged dryness in eastern Africa and could negatively affect seasonal crop production**
- **Below-average rainfall since the beginning of the March-May rainfall season has led to developing long-term dryness over parts of southern and northeastern Ethiopia**



1) As the southern Africa rainfall season is approaching to an end, reduced rainfall observed across southern Africa has sustained moisture deficits throughout portions of Zimbabwe, Mozambique, Botswana, and the Maize Triangle region of South Africa.

2) The lack of rainfall during the mid-season dry spells has resulted in severe moisture deficits over southern Zimbabwe, northern South Africa, and eastern Botswana. This has already led to permanent wilting and failure of crops in many local areas.

3) Below-average rainfall during the last thirty days has resulted in the development of a short-term dryness, with rainfall deficits ranging between 25-50mm across central and eastern regions of Ethiopia, eastern Eritrea, Djibouti, southern Sudan, northwestern Uganda, northern and central Kenya, and northwestern and southern Somalia. The dry conditions have already adversely impacted cropping and pastoral activities in many local areas of eastern Africa.

4) Poor rains recorded since the beginning of the March-May rainfall season has led to the settlement of a long-term dryness over parts of southern and northeastern Ethiopia. The delayed onsets to the rainfall season and poor rainfall distribution have contributed to seasonal rainfall deficits exceeding 100mm in some local areas of Ethiopia. Although widespread rains are expected over Ethiopia during the next week, the chance to neutralize up-to-date moisture deficits remains unlikely.

Long-awaited rains return to the Greater Horn of Africa, while little to no rain falls over western Kenya

Abundant rainfall (> 50mm) was observed locally over southwestern Ethiopia and portions of southeastern Sudan during the past seven days (**Figure 1**). Heavy rains were also recorded over local areas in northeastern Ethiopia, southern Somalia, southeastern Kenya, and the Lake Victoria regions in northwestern and eastern Tanzania during the past week. In Somalia, this marked the onset of the April-June, *Gu* rainfall season over cropping areas in the south, where no rainfall has been recorded since the end of last year. In contrast, little to no rainfall was observed over the *belg* cropping areas of central and eastern Ethiopia, pastoral areas of northwestern Kenya, and cropping areas of northern Uganda during the past seven days. While the onset of the rainfall season helps to neutralize rainfall shortages over localized areas, the poor distribution of rainfall is likely to enhance moisture deficits over areas severely-hit by the prolonged dry spells.

During the last thirty days, developing dryness has settled in across regions of the Greater Horn of Africa, including southern and northeastern parts of Ethiopia, southern Somalia, Kenya, southern Sudan, and northern Uganda, with moisture deficits ranging between 50-100mm (**Figure 2**). In southern and northeastern Ethiopia, below-average rainfall has resulted in rainfall deficits exceeding 50mm during the past thirty days. Compared to the previous week, rainfall deficits have not only increased in magnitude but also expanded in spatial extent across these regions due to the delay and poor distribution of the rainfall season. On the other hand, seasonal rainfall amounts were recorded locally in southwestern Ethiopia, southeastern Sudan, southeastern Uganda, and southeastern Kenya during the past thirty days.

For the upcoming seven days, widespread, though moderate to heavy (20-50mm) rainfall is expected over eastern Africa region, including southwestern Kenya and southwestern Uganda.

Late start to the rainfall season affects crop conditions in Ethiopia

The Water Requirement Satisfaction Index (WRSI) during the 1st dekad of April shows many areas in western and northeastern Ethiopia, where the March-Nov rains are much needed (**Figure 3**). This has resulted from the delayed onset and uneven distribution of rainfall since the beginning of the season. However, good cropping conditions were observed over local areas in the SNNPR and western Oromiya region in southwestern Ethiopia. These regions, not surprisingly, coincide with areas characterized by marginal moisture surpluses during the last thirty days. Nevertheless, the persistence of the poorly distributed rainfall could rapidly deteriorate positive WRSI conditions and ultimately affect the long-rain crop production.

Satellite Estimated Rainfall (mm)
Valid: April 12th – April 18th, 2011

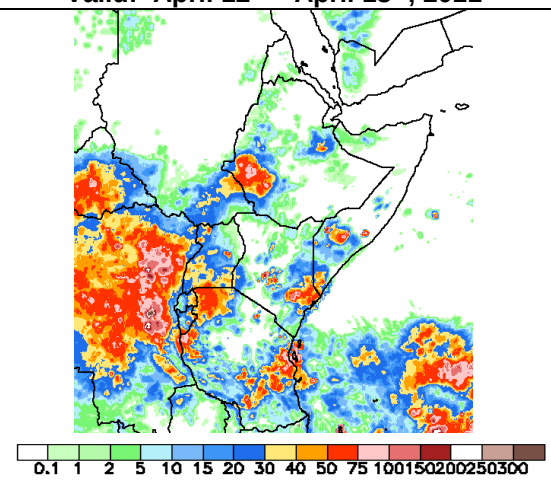


Figure 1: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: March 20th – April 18th, 2011

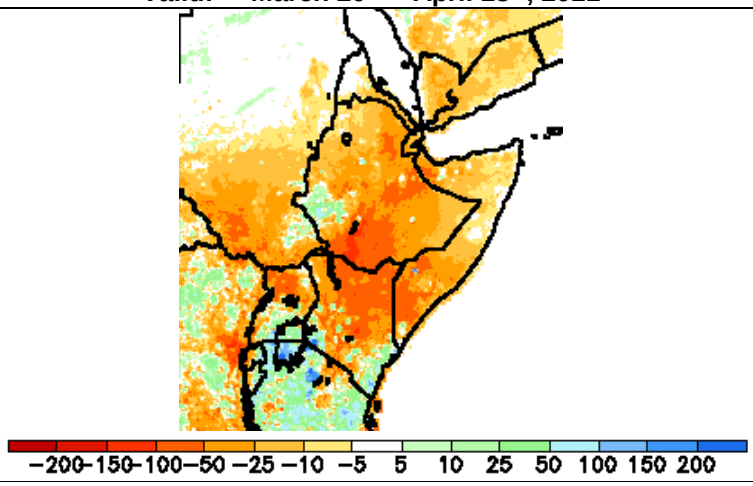


Figure 2: NOAA/CPC

Water Requirement Satisfaction Index
Valid: As of 1st Dekad of April, 2011

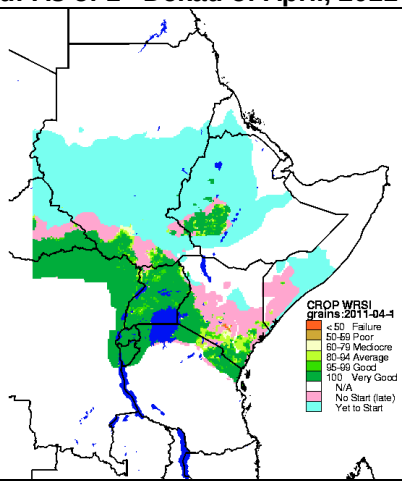


Figure 3: USGS/EROS

Note: The hazards assessment map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards assessment process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and a number of other national and regional organizations in the countries concerned. Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-763-8000 x7566. Questions about the USAID FEWSNET activity may be directed to Gary Eilerts, USAID Program Manager for FEWSNET, 1-202-219-0500 or geilerts@usaid.gov.